

REMARKS

Claim 1 has been amended to incorporate the limitation of claim 19, and now recites the arrangement of two planetary gears on each of at least one shaft which is rotatably mounted at a fixed position in the housing, wherein one of the planetary gears on each shaft is driven by an annular gear fixed to the rotor, and the other planetary gear drives a sun gear on a shaft which drives a spur gear stage.

Claims 1-2, 4, 7, 10, 14 and 16-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi (JP 07229471) in view of Hehenberger (WO 96/11338). This rejection is traversed for the reasons following.

Takahashi discloses a pair of planet wheels 11 on fixed-position shafts 12, the planet wheels 11 being driven to rotate by an annular gear 10 fixed to the rotor. The planet wheels 11, in turn, drive a sun wheel on a shaft 9 connected to a spur gear 16 on a coaxial shaft 15 (Figure 1). Figure 3 appears to show the shaft 9 driving additional planet wheels (not on fixed-position shafts), which in turn drive a further sun wheel on a further shaft 5. There is no suggestion of first and second planet wheels on each fixed-position shaft, in order to obtain additional gear reduction without an arrangement of two sun wheels.

Hehenberger (Figure 3) discloses a pair of planet wheels 45 which are mounted to rotate with rotor hub 27, and drive a centrally located sun wheel 46 on a shaft 47, which in turn drives additional planet wheels (not on fixed-position shafts), which in turn drive a further sun wheel 19 on a further shaft 49. The arrangement is similar to the arrangement disclosed in Figure 3 of Takahashi, but for the planet wheels 45 being mounted on shafts which rotate around a central axis, rather than occupying a fixed-position.

Neither Takahashi nor Hehenberger suggests having two planetary gears on each of one or more fixed-position shafts, wherein each first planetary gear is driven by the rotor and each second planetary gear drives a sun gear. The invention as claimed provides multiple gear reductions in a highly compact transmission which requires only a single sun gear, and does not require any of the radially outer shafts to rotate about the central axis of the transmission.

The claims as amended being definite and patentable over the art of record, withdrawal of the rejections and early allowance are solicited. If any new art-based rejection should ensue, such action should be non-final since claim 19 has not been amended (it is noted that this claim has not been specifically addressed). If any objections remain, a call to the undersigned is requested.

It is believed that no fees or charges are required at this time in connection with the present application; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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